GEO Engineering, Inc.
150 Mineral Spring Drive
Dover, New Jersey 07801
Phone (201) 361-3600
FAX (201) 361-3800

LETTER OF TRANSMITTAL

Date:	1/30/97	Job No.:	94039 T1
Attention:	Joseph J. Nowak		
Re:	Hexcel Corporation		
	Lodi Borough, Bergen County, NJ		
	ISRA Case No. 86009		

To: NJDEP-BEECRA
401 East State Street
Trenton, NJ 08625

WE ENCLOSE THE FOLLOWING:

VIA: ☐ Courier /Hand Delivered ☒ Overnight Express ☐ First Class Mail ☐

COPIES	DATE	DESCRIPTION
3	1/29/97	Progress Report from GEO Engineering to NJDEP

Remarks:

SIGNED: Marjorie A. Piette
Marjorie A. Piette

COPY TO: A. William Nosil
Lisa M. Bromberg
James Higdon

If enclosures are not as noted, kindly notify us at once.

GEO Engineering

150 Mineral Spring Drive
Dover, New Jersey 07801
201 361-3600 FAX 361-3800

January 29, 1997

Joseph J. Nowak
New Jersey Department of Environmental Protection
Bureau of Environmental Evaluation and Cleanup Responsibility Assessment
CN 432
401 East State Street
Trenton, NJ 08625

SUBJ: **Hexcel Corporation**
Lodi Borough, Bergen County, New Jersey
ISRA Case No. 86009
GEO Project No. 94039

Dear Mr. Nowak:

On behalf of Hexcel Corporation (Hexcel), the following is the progress report of activities carried out during October, November and December of 1996. This quarterly report is prepared in accordance with the Industrial Site Recovery Act (ISRA) requirements for the former Hexcel facility in Lodi, New Jersey.

The following topics are discussed in this progress report:

1. Ground Water/DNAPL/LNAPL Monitoring

   a) Quarterly Monitoring
   b) Monthly Monitoring

2. Product Recovery Program

   a) DNAPL Recovery
   b) LNAPL Recovery

3. Ground Water Treatment System

   a) Evaluation and Testing of Ground Water Recovery and Treatment System
   b) Treatment of Basement Seepage Water and Ground Water

4. Off-Site Investigation

5. Waste Disposal Documentation

6. Schedule and Cost Estimates

882550002

1. Ground Water/DNAPL/LNAPL Monitoring

This section includes the results of quarterly monitoring performed in October 1996, and monthly monitoring performed in November and December 1996. Modifications to the NJDEP approved "Groundwater/DNAPL/LNAPL Monitoring Plan" prepared by Killam Associates had been presented in our progress report dated October 24, 1994. The modifications were approved by the NJDEP in its June 12, 1995 letter. Sections 1a and 1b provide details for quarterly and monthly monitoring, respectively.

1a. Quarterly Monitoring

Hexcel conducted quarterly ground water elevation, DNAPL and LNAPL monitoring on October 9, 1996 in accordance with the monitoring plan. Results of the quarterly monitoring are tabulated in Table 1. Figures 1 and 2 illustrate shallow and deep ground water elevation contours respectively. Contour Map Reporting Forms are enclosed for each of the contour maps. Table 2 contains a summary of well construction data to accompany the Contour Map Reporting Form for Figure 1. Figures 1 and 2, Tables 1 and 2, and the reporting forms are located in Appendix A.

1b. Monthly Monitoring

In addition to the quarterly monitoring conducted in October, Hexcel conducted monthly DNAPL and LNAPL monitoring on November 25 and December 23, in accordance with the monitoring plan and modifications approved by the NJDEP in its June 12, 1995 letter. Additionally, the following modifications were made to the monthly monitoring plan this quarter:

- RW1-1, RW7-5 and PB-1: These wells were added to the monthly monitoring program in November subsequent to detection of DNAPL on the product-interface meter during the October quarterly monitoring.

- CW-7: CW-7 was removed from the monthly monitoring program in December subsequent to non-detection of LNAPL for three consecutive months in August, September and October. The product-interface meter probe did not register presence of LNAPL in the well and visual inspection of the probe confirmed this.

Results for November and December monthly monitoring are provided in Tables 3 and 4 located in Appendix B.

Hexcel will continue to modify the monthly monitoring by the addition or deletion of wells in accordance with the approved plan.

2. Product Recovery Program

This section includes results for the temporary product recovery program currently being implemented at the site. This product recovery program, consisting of manually recovering product from affected wells on a weekly basis, was initiated on October 20, 1994. After one month, the program's frequency was reduced to twice a month due to a reduction in the quantity of product recovered. Product recovery continued at the rate of at least twice a month through the week of June 19, 1995. In accordance with the NJDEP's June 12, 1995 letter, weekly product recovery was resumed the week of June 26, 1995.

NJDEP approved the modifications to the weekly product recovery program for LNAPL and DNAPL in its May 23, 1996 letter. Hexcel modified the weekly product recovery program by revising the criteria for inclusion of wells in the program. The modifications were communicated to the NJDEP in a letter dated September 21, 1995 and also in the October 1995 progress report. According to the modifications, any well which has no measurable recovery for three consecutive weekly recovery rounds will be moved to monthly monitoring and recovery. For the purposes of product collection, quantities greater than 0.1 gallon (approximately 1 cup) are considered to be measurable.

2a. DNAPL Recovery

During the initial portion of the fourth quarter of 1996, there were no wells included in the DNAPL weekly program because no wells had indicated recoverable quantities of DNAPL for three or more weeks prior to the fourth quarter. During the monthly monitoring in November, MW-6 indicated presence of recoverable amounts of DNAPL. Subsequently, weekly product recovery was performed at MW-6 for the remaining period of the fourth quarter. DNAPL recovery during this quarter is summarized in Table 5, located in Appendix C.

2b. LNAPL Recovery

In accordance with the approved modifications to the product recovery program, weekly product recovery was not performed during the fourth quarter of 1996 because recoverable quantities of LNAPL were not indicated in any of the wells during September. The same was true for quarterly monitoring conducted in October and monthly monitoring conducted in November and December 1996. LNAPL recovery is summarized in Table 6, located in Appendix C.

3. Ground Water Treatment System

This section includes documentation of Hexcel's efforts regarding evaluation and operation of the existing ground water treatment system. The following subsections provide the details.

3a. Evaluation and Testing of Ground Water Recovery and Treatment System

Hexcel performed pilot tests on the ground water recovery and treatment system in the fourth quarter of 1996. Hexcel is currently preparing a report to provide the methodology of the pilot tests, the results and the conclusions to the NJDEP. The schedule provided in Table 7 (Appendix D) includes current estimates for reporting the design proposal to the NJDEP.

3b. Treatment of Basement Seepage Water and Ground Water

Basement seepage water continues to be treated on-site and discharged to the Passaic Valley Sewerage Commissioners (PVSC) sewer line. Ground water pumped during the pilot tests was also discharged to the sewer line after treatment.

4. Off-Site Investigation

Hexcel has been communicating with the U.S. Army Corps of Engineers (Army Corps) for the past several months in an effort to obtain information on the status of the well MW08 installed by the Army Corps across the Saddle River from the Hexcel site. In a recent conversation, the Army Corps confirmed that MW08 has not been abandoned and is available for sampling. Hexcel has requested permission to access the above-referenced well. A copy of the most recent access-request letter to the Army Corps is attached as Appendix E. In a follow-up conversation, the Army Corps advised us that we would hear from them by mid-February regarding the access permission.

5. Waste Disposal Documentation

Enclosed as Appendix F are manifests and a summary table for waste disposal during October, November and December of 1996.

6. Schedule and Cost Estimates

Table 7 located in Appendix D presents an updated estimate of the schedule of remaining remedial activities. There has been no change to date in the overall estimate of cleanup costs.

We will continue to submit quarterly progress reports according to the schedule. Please call us if you have any questions regarding the above.

Sincerely,

GEO ENGINEERING, INC.

Marjorie A. Piette

Marjorie A. Piette
Project Manager

MAP/lll
Enclosures
cc: A. William Nosil
Lisa Bromberg, Esq.
James Higdon

Appendix A

TABLE 1: QUARTERLY WATER LEVEL/PRODUCT THICKNESS MEASUREMENTS (10/9/96)
Former Hexcel Facility
Lodi, New Jersey

-All measurements in feet -
-All elevations in feet (NGVD)-

GEO Engineering
January 1997
File: 94039/wldata/Quartrly.xls
Entered by: SG Checked by: RMS

Well ID	Type	Depth to Water (10/9/96)	Depth to Product DNAPL	Depth to Product LNAPL	Product Thickness	Depth to Bottom (10/9/96)	Elevation Top of Casing	Water Elevation	Well Construction (all 4" diameter unless otherwise noted) Type	Casing	Comments
RW Series:											
RW1-1	shallow	5.05	--	--	--	14.25	28.24	23.19	flush	s.steel	Product on probe (DNAPL)
RW6-1	shallow	3.08	--	--	--	13.74	28.84	25.76	flush	s.steel	Product on probe (DNAPL)
RW6-2	shallow	3.20	--	--	--	14.78	29.34	26.14	flush	s.steel	
RW6-3	shallow	3.94				5.44	28.72	24.78	flush	s.steel	
RW7-1	shallow	5.70	--	--	--	16.52	26.25	20.55	flush	s.steel	Orange floc on probe.
RW7-2	shallow	5.99	--	--	--	16.84	26.48	20.49	flush	s.steel	Sediment on probe.
RW7-3	shallow	6.30	--	--	--	17.24	26.78	20.48	flush	s.steel	Sediment on probe.
RW7-4	shallow	6.60	--	--	--	19.06	27.11	20.51	flush	s.steel	Product on probe (DNAPL).
RW7-5	shallow	7.16	--	--	--	19.14	27.57	20.41	flush	s.steel	Product on probe (DNAPL); sediment on probe.
RW7-6	shallow	6.18	--	--	--	14.96	26.48	20.30	flush	s.steel	
RW7-7	shallow	6.54	--	--	--	14.86	26.89	20.35	flush	s.steel	Sediment on probe.
RW7-8	shallow	5.34	--	--	--	14.96	25.90	20.56	flush	s.steel	
RW7-9	shallow	6.50	--	--	--	16.12	26.87	20.37	flush	s.steel	Sediment on probe.
RW7-10	shallow	6.56	--	--	--	14.16	26.10	19.54	flush	s.steel	Sediment on probe.
RW15-1	shallow	6.96	--	--	--	14.90	29.95	22.99	flush	s.steel	Sediment on probe.
RW15-2	shallow						30.15		flush	s.steel	Well not included in quarterly monitoring plan
P Series:											
P-1	shallow	6.60	--	--	--	9.66	30.09	23.49	flush	1.5" pvc	
P-2	shallow	WA	--	--	--	WA	30.19	WA	flush	1.5" pvc	Well was sealed on March 29, 1996.
PI Series:											
PI-1	deep						26.90		flush	8" s.steel	Well not included in quarterly monitoring plan

TABLE 1: QUARTERLY WATER LEVEL/PRODUCT THICKNESS MEASUREMENTS (10/9/96)
Former Hexcel Facility
Lodi, New Jersey

-All measurements in feet -
-All elevations in feet (NGVD)-

GEO Engineering
January 1997
File: 94039/wldata/Quartrly.xls
Entered by: SG Checked by: RMS

Well ID	Type	Depth to Water (10/9/96)	Depth to Product		Product Thickness	Depth to Bottom (10/9/96)	Elevation Top of Casing	Water Elevation	Well Construction (all 4" diameter unless otherwise noted)		
			DNAPL	LNAPL					Type	Casing	Comments
CW Series:											
CW-1	shallow	7.76	--	--	--	11.46	29.77	22.01	flush	s.steel	Orange floc on probe.
CW-2	shallow						29.51		flush	s.steel	Well not included in quarterly monitoring plan
CW-3	shallow						29.72		flush	s.steel	Recovery well; not included in monitoring plan
CW-4	shallow	6.02	--	--	--	10.96	28.83	22.81	flush	s.steel	
CW-5	shallow						28.67		flush	s.steel	Recovery well; not included in monitoring plan
CW-6	shallow						28.93		flush	s.steel	Well not included in quarterly monitoring plan
CW-7	shallow	6.12	--	--	--	13.98	26.13	20.01	flush	s.steel	
CW-8	shallow	7.15	--	--	--	13.89	26.77	19.62	flush	s.steel	
CW-9	shallow						26.37		flush	s.steel	Recovery well; not included in monitoring plan
CW-10	shallow	5.98	--	--	--	10.23	25.91	19.93	flush	s.steel	Sediment on probe.
CW-11	shallow						25.74		vaultbox	s.steel	Recovery well; not included in monitoring plan
CW-12	shallow	6.04	--	--	--	13.96	25.71	19.67	flush	s.steel	Product on probe (DNAPL)
CW-13	shallow						26.05		flush	s.steel	Well not included in quarterly monitoring plan
CW-14	shallow	6.80	--	--	--	13.88	26.37	19.57	flush	s.steel	
CW-15	shallow						26.31		flush	s.steel	Recovery well; not included in monitoring plan
CW-16	shallow	6.28	--	--	--	13.80	26.45	20.17	flush	s.steel	Product on probe (DNAPL)
CW-17	shallow	5.74	--	--	--	13.94	26.25	20.51	flush	s.steel	Not accessible; pallets of drums covering the well
CW-18	shallow						26.61		flush	s.steel	Recovery well; not included in monitoring plan
CW-19	shallow						26.50		flush	s.steel	Well not included in quarterly monitoring plan
CW-20	shallow						26.74		flush	s.steel	Well not included in quarterly monitoring plan
CW-21	shallow						26.77		flush	s.steel	Recovery well; not included in monitoring plan
CW-22	shallow						26.35		flush	s.steel	Well not included in quarterly monitoring plan

TABLE 1: QUARTERLY WATER LEVEL/PRODUCT THICKNESS MEASUREMENTS (10/9/96)
Former Hexcel Facility
Lodi, New Jersey

-All measurements in feet.-
-All elevations in feet (NGVD)-

GEO Engineering
January 1997
File: 94039/wldata/Quartrly.xls
Entered by: SG Checked by: RMS

Well ID	Type	Depth to Water (10/9/96)	Depth to Product DNAPL	Depth to Product LNAPL	Product Thickness	Depth to Bottom (10/9/96)	Elevation Top of Casing	Water Elevation	Well Construction (all 4" diameter unless otherwise noted) Type	Casing	Comments
MW Series:											
MW-1	(a)	9.77	--	--	--	23.52	32.42	22.65	stickup	pvc	
MW-2	shallow	7.52	--	--	--	10.24	31.00	23.48	stickup	pvc	
MW-3	deep	9.85	--	--	--	30.75	31.13	21.28	stickup	pvc	Sediment on probe.
MW-4	shallow	8.07	--	--	--	9.95	32.33	24.26	stickup	pvc	
MW-5	deep	10.72	--	--	--	28.37	32.54	21.82	stickup	pvc	
MW-6	shallow	10.14	--	--	--	18.31	30.74	20.60	stickup	pvc	Product on probe (DNAPL)
MW-7	deep	9.08	--	--	--	32.90	30.68	21.60	stickup	pvc	
MW-8	shallow	10.12	--	--	--	17.34	30.26	20.14	stickup	pvc	Product on probe (DNAPL)
MW-9	deep	8.27	--	--	--	29.56	29.83	21.56	stickup	pvc	
MW-10	shallow	10.98	--	--	--	16.76	30.83	19.85	stickup	pvc	
MW-11	deep	9.47	--	--	--	33.48	30.78	21.31	stickup	pvc	
MW-12	shallow	10.40	--	--	--	17.03	31.01	20.61	stickup	pvc	
MW-13	deep	9.26	--	--	--	33.05	31.16	21.90	stickup	pvc	
MW-14	shallow	9.95	--	--	--	15.63	30.70	20.75	stickup	pvc	
MW-15	deep	8.66	--	--	--	25.62	30.77	22.11	stickup	pvc	
MW-16	shallow	6.52	--	--	--	12.60	29.69	23.17	stickup	pvc	
MW-17	shallow	9.04	--	--	--	14.08	31.44	22.40	stickup	pvc	
MW-18	shallow	8.79	--	--	--	11.35	32.23	23.44	stickup	pvc	
MW-19	deep	6.90	--	--	--	26.62	29.08	22.18	stickup	pvc	
MW-20	shallow	5.09	--	--	--	20.06	27.95	22.86	flush	pvc	
MW-21	shallow	8.60	--	--	--	15.12	30.67	22.07	stickup	pvc	Orange floc on probe.
MW-22	shallow	4.97	--	--	--	8.22	28.45	23.48	flush	pvc	
MW-23	shallow	4.04	--	--	--	9.60	27.51	23.47	flush	pvc	Sediment on probe.
MW-24	shallow	3.92	--	--	--	9.66	26.51	22.59	flush	pvc	Orange floc on probe.
MW-25	shallow	6.48	--	--	--	12.72	26.03	19.55	flush	pvc	

882550010

TABLE 1: QUARTERLY WATER LEVEL/PRODUCT THICKNESS MEASUREMENTS (10/9/96)
Former Hexcel Facility
Lodi, New Jersey

-All measurements in feet -
-All elevations in feet (NGVD)-

GEO Engineering
January 1997
File: 94039/wldata/Quartrly.xls
Entered by: SG Checked by: RMS

Well ID	Type	Depth to Water (10/9/96)	Depth to Product DNAPL	Depth to Product LNAPL	Product Thickness	Depth to Bottom (10/9/96)	Elevation Top of Casing	Water Elevation	Well Construction (all 4" diameter unless otherwise noted) Type	Casing	Comments
MW Series:											
MW-26	(b)	8.43	--	--	--	17.93	28.85	20.42	flush	2" pvc	
MW-27	shallow	7.30	--	--	--	12.56	31.43	24.13	stickup	pvc	
MW-28	shallow	9.10	--	--	--	14.76	29.68	20.58	stickup	pvc	Orange floc on probe.
MW-29	shallow	3.88	--	--	--	9.34	27.32	23.44	flush	pvc	Sediment on probe.
MW-30	shallow	5.50	--	--	--	10.48	28.08	22.58	flush	pvc	Orange floc on probe.
MW-31	shallow	4.56	--	--	--	10.60	27.95	23.39	flush	pvc	
MW-32	shallow	WA				WA	32.51	WA	stickup	pvc	Well was sealed on March 29, 1996.
MW-33	shallow	9.74	--	--	--	17.01	31.72	21.98	stickup	pvc	Orange floc on probe.
PB Series:											
PB-1	shallow	2.94	--	--	--	5.36	21.78	18.84	stickup	2" g.steel	Product on probe (DNAPL); sediment on probe.
PB-2	shallow	1.68	--	--	--	5.82	21.25	19.57	stickup	2" g.steel	Product on probe (DNAPL); sediment on probe.
PB-4	shallow	1.72	--	--	--	5.19	21.52	19.80	stickup	2" g.steel	

NOTES: All measurements of depths are from the top of casing unless otherwise noted.

-- : Not detected by product interface meter.

N/A : Well not accessible.

(a) : Subsurface investigation in December 1995 near MW-1 revealed that MW-1 is not a deep well; refer to Section 1a of the April 1996 Progress Report for detail

(b) : Construction data for MW-26 reveal that MW-26 is not a deep well; refer to Section 1a of the April 1996 Progress Report for details.

WA : Well was sealed on March 29, 1996. Refer to April 1996 Progress Report for details.

* : In wells with LNAPL, water levels are corrected using the equation: DTW (corrected) = DTW (measured) - (Product thickness * specific gravity). Specific gravity of 0.88 used for water level correction (petroleum lubricating oil).

Many of the wells have accumulated sediment which results in slight fluctuations in the measurements of depth to bottom.

TABLE 2: WELL CONSTRUCTION DATA
Former Hexcel Facility
Lodi, New Jersey

-All measurements in feet -
-All elevations in feet (NGVD)-

GEO Engineering
January 1997
File: 94039/wldata/wellscrn.xls

Well ID	Type	Ground Elevation	Elevation Top of Casing	Depth to Bottom (10/9/96)	Length of Screen	Elevation Top of Screen	Water Elevation (10/9/96)	Well Construction *		Installation		Water Table Elv. > Top of Screen Elv.
								Type	Casing	Date	By	
RW Series:												
RW1-1	shall.	28.67	28.24	14.25	10	23.67	23.19	flush	s.steel	10/91	Heritage	No
RW6-1	shall.	29.28	28.84	13.74	5	20.28	25.76	flush	s.steel	8/90	Heritage	Yes
RW6-2	shall.	U	29.34	14.78	5	U	26.14	flush	s.steel	8/90	Heritage	U
RW6-3	shall.	29.02	28.72	5.44	5	27.52	24.78	flush	s.steel	8/90	Heritage	No
RW7-1	shall.	26.94	26.25	16.52	5	13.94	20.55	flush	s.steel	8/90	Heritage	Yes
RW7-2	shall.	27.07	26.48	16.84	5	14.57	20.49	flush	s.steel	8/90	Heritage	Yes
RW7-3	shall.	27.17	26.78	17.24	5	14.67	20.48	flush	s.steel	8/90	Heritage	Yes
RW7-4	shall.	27.60	27.11	19.06	5	13.60	20.51	flush	s.steel	8/90	Heritage	Yes
RW7-5	shall.	27.97	27.57	19.14	5	12.97	20.41	flush	s.steel	9/90	Heritage	Yes
RW7-6	shall.	27.10	26.48	14.96	5	17.10	20.30	flush	s.steel	9/90	Heritage	Yes
RW7-7	shall.	27.25	26.89	14.86	5	17.25	20.35	flush	s.steel	9/90	Heritage	Yes
RW7-8	shall.	26.71	25.90	14.96	5	16.71	20.56	flush	s.steel	9/90	Heritage	Yes
RW7-9	shall.	27.18	26.87	16.12	5	15.18	20.37	flush	s.steel	2/91	Heritage	Yes
RW7-10	shall.	26.50	26.10	14.16	5	16.50	19.54	flush	s.steel	2/91	Heritage	Yes
RW15-1	shall.	30.43	29.95	14.90	10	25.68	22.99	flush	s.steel	8/90	Heritage	No
RW15-2	shall.	30.37	30.15		10	26.37	NI	flush	s.steel	8/90	Heritage	NI
P Series:												
P-1	shall.	U	30.09	9.66	U	U	23.49	flush	1.5" pvc	U	U	U
P-2	shall.	U	30.19	WA	U	U	WA	flush	1.5" pvc	U	U	U, WA
PI Series:												
PI-1	deep	U	26.90		U	U	NI	flush	s.steel	10/91	Heritage	^

TABLE 2: WELL CONSTRUCTION DATA
Former Hexcel Facility
Lodi, New Jersey

-All measurements in feet -
-All elevations in feet (NGVD)-

GEO Engineering
January 1997
File: 94039/wldata/wellscrn.xls

Well ID	Type	Ground Elevation	Elevation Top of Casing	Depth to Bottom (10/9/96)	Length of Screen	Elevation Top of Screen	Water Elevation (10/9/96)	Well Construction *		Installation		Water Table Elv. > Top of Screen Elv.
								Type	Casing	Date	By	
CW Series:												
CW-1	shall.	30.27	29.77	11.46	5	23.27	22.01	flush	s.steel	9/90	Heritage	No
CW-2	shall.	30.11	29.51		5	23.11	NI	flush	s.steel	9/90	Heritage	NI
CW-3	recov.	U	29.72		5	U	NI	flush	s.steel	9/90	Heritage	NI
CW-4	shall.	29.10	28.83	10.96	5	22.60	22.81	flush	s.steel	7/90	Heritage	Yes
CW-5	recov.	28.89	28.67		5	22.39	NI	flush	s.steel	7/90	Heritage	NI
CW-6	shall.	29.25	28.93		5	25.25	NI	flush	s.steel	9/90	Heritage	NI
CW-7	shall.	26.70	26.13	13.98	5	17.70	20.01	flush	s.steel	8/90	Heritage	Yes
CW-8	shall.	26.70	26.77	13.89	5	17.70	19.62	flush	s.steel	8/90	Heritage	Yes
CW-9	recov.	26.60	26.37		5	17.60	NI	flush	s.steel	8/90	Heritage	NI
CW-10	shall.	26.50	25.91	10.23	5	17.50	19.93	flush	s.steel	8/90	Heritage	Yes
CW-11	recov.	26.60	25.74		5	17.60	NI	vaultbox	s.steel	8/90	Heritage	NI
CW-12	shall.	26.51	25.71	13.96	5	17.51	19.67	flush	s.steel	8/90	Heritage	Yes
CW-13	shall.	26.60	26.05		5	17.60	NI	flush	s.steel	8/90	Heritage	NI
CW-14	shall.	26.70	26.37	13.88	5	17.70	19.57	flush	s.steel	8/90	Heritage	Yes
CW-15	recov.	26.90	26.31		5	17.90	NI	flush	s.steel	8/90	Heritage	NI
CW-16	shall.	27.00	26.45	13.80	5	18.00	20.17	flush	s.steel	8/90	Heritage	Yes
CW-17	shall.	27.10	26.25	13.94	5	18.10	20.51	flush	s.steel	8/90	Heritage	Yes
CW-18	recov.	27.20	26.61		5	18.20	NI	flush	s.steel	8/90	Heritage	NI
CW-19	shall.	27.20	26.50		5	18.20	NI	flush	s.steel	8/90	Heritage	NI
CW-20	shall.	27.30	26.74		5	18.30	NI	flush	s.steel	8/90	Heritage	NI
CW-21	recov.	27.40	26.77		5	18.40	NI	flush	s.steel	8/90	Heritage	NI
CW-22	shall.	27.30	26.35		5	18.30	NI	flush	s.steel	8/90	Heritage	NI

TABLE 2: WELL CONSTRUCTION DATA
Former Hexcel Facility
Lodi, New Jersey

-All measurements in feet -
-All elevations in feet (NGVD)-

GEO Engineering
January 1997
File: 94039/wldata/wellscrn.xls

Well ID	Type	Ground Elevation	Elevation Top of Casing	Depth to Bottom (10/9/96)	Length of Screen	Elevation Top of Screen	Water Elevation (10/9/96)	Well Construction *		Installation		Water Table Elv. > Top of Screen Elv.
								Type	Casing	Date	By	
MW Series:												
MW-1	(a)	29.03	32.42	23.52	5	13.88	22.65	stickup	pvc	7/88	Environ	(a)
MW-2	shall.	27.90	31.00	10.24	5	26.13	23.48	stickup	pvc	8/88	Environ	No
MW-3	deep	27.84	31.13	30.75	5	5.30	21.28	stickup	pvc	8/88	Environ	^
MW-4	shall.	29.02	32.33	9.95	5	27.49	24.26	stickup	pvc	8/88	Environ	No
MW-5	deep	29.03	32.54	28.37	5	9.12	21.82	stickup	pvc	8/88	Environ	^
MW-6	shall.	27.14	30.74	18.31	10	22.12	20.60	stickup	pvc	8/88	Environ	No
MW-7	deep	27.18	30.68	32.90	5	2.55	21.60	stickup	pvc	7/88	Environ	^
MW-8	shall.	26.92	30.26	17.34	10	22.98	20.14	stickup	pvc	8/88	Environ	No
MW-9	deep	26.89	29.83	29.56	5	5.09	21.56	stickup	pvc	7/88	Environ	^
MW-10	shall.	27.33	30.83	16.76	11	24.81	19.85	stickup	pvc	8/88	Environ	No
MW-11	deep	27.28	30.78	33.48	10	6.86	21.31	stickup	pvc	7/88	Environ	^
MW-12	shall.	27.62	31.01	17.03	10	24.05	20.61	stickup	pvc	8/88	Environ	No
MW-13	deep	27.63	31.16	33.05	5	2.89	21.90	stickup	pvc	7/88	Environ	^
MW-14	shall.	27.12	30.70	15.63	9	24.18	20.75	stickup	pvc	8/88	Environ	No
MW-15	deep	27.17	30.77	25.62	5	10.13	22.11	stickup	pvc	7/88	Environ	^
MW-16	shall.	26.71	29.69	12.60	5	22.14	23.17	stickup	pvc	8/88	Environ	Yes
MW-17	shall.	29.10	31.44	14.08	8	25.10	22.40	stickup	pvc	1/89	Environ	No
MW-18	shall.	29.04	32.23	11.35	5	25.97	23.44	stickup	pvc	8/88	Environ	No
MW-19	deep	27.30	29.08	26.62	5	7.30	22.18	stickup	pvc	1/89	Environ	^
MW-20	shall.	28.50	27.95	20.06	5	13.50	22.86	flush	pvc	11/90	Heritage	Yes
MW-21	shall.	28.80	30.67	15.12	10	25.80	22.07	stickup	pvc	9/90	Heritage	No
MW-22	shall.	28.73	28.45	8.22	5	25.73	23.48	flush	pvc	12/90	Heritage	No
MW-23	shall.	27.83	27.51	9.60	5	22.83	23.47	flush	pvc	11/90	Heritage	Yes
MW-24	shall.	26.93	26.51	9.66	5	21.93	22.59	flush	pvc	11/90	Heritage	Yes
MW-25	shall.	26.47	26.03	12.72	10	23.47	19.55	flush	pvc	9/90	Heritage	No

TABLE 2: WELL CONSTRUCTION DATA
Former Hexcel Facility
Lodi, New Jersey

-All measurements in feet -
-All elevations in feet (NGVD)-

GEO Engineering
January 1997
File: 94039/wldata/wellscrn.xls

Well ID	Type	Ground Elevation	Elevation Top of Casing	Depth to Bottom (10/9/96)	Length of Screen	Elevation Top of Screen	Water Elevation (10/9/96)	Well Construction *		Installation		Water Table Elv. > Top of Screen Elv.
								Type	Casing	Date	By	
MW Series:												
MW-26	(b)	29.26	28.85	17.93	2	12.26	20.42	flush	2" pvc	12/90	Heritage	(b)
MW-27	shall.	29.10	31.43	12.56	5	24.10	24.13	stickup	pvc	9/90	Heritage	Yes
MW-28	shall.	27.50	29.68	14.76	10	24.50	20.58	stickup	pvc	9/90	Heritage	No
MW-29	shall.	27.50	27.32	9.34	5	22.50	23.44	flush	pvc	2/91	Heritage	Yes
MW-30	shall.	28.25	28.08	10.48	5	22.25	22.58	flush	pvc	2/91	Heritage	Yes
MW-31	shall.	28.33	27.95	10.60	5	22.33	23.39	flush	pvc	2/91	Heritage	Yes
MW-32	shall.	U	32.51	WA	6	U	WA	stickup	pvc	4/92	Heritage	WA
MW-33	shall.	U	31.72	17.01	10	U	21.98	stickup	pvc	4/92	Heritage	U
PB Series:												
PB-1	shallow	17.46	21.78	5.36	1	16.46	18.84	stickup	2" g.steel	6/95	GEO	Yes
PB-2	shallow	17.50	21.25	5.82	1	16.70	19.57	stickup	2" g.steel	6/95	GEO	Yes
PB-4	shallow	17.52	21.52	5.19	1	16.72	19.80	stickup	2" g.steel	6/95	GEO	Yes

NOTES: Refer to "Table 2: Summary of Well Construction Data " provided in Appendix B of Progress Report dated July 31, 1995 for the list of sources used for compiling this table.

All measurements of depths are from the top of casing unless otherwise noted.

N/A: Well was inaccessible on the day of quarterly monitoring.

NI: Well not included in the quarterly monitoring.

U: Unknown.

*: All wells 4" diameter unless otherwise noted.

^: Well is screened in the confined aquifer, therefore, the question is not applicable.

(a): Ground water elevation data from MW-1 have been excluded from both shallow and deep aquifer contours; refer to Section 1a of the April 1996 Report for details.

(b): Ground water elevation data from MW-26 have been excluded from both shallow and deep aquifer contours; refer to Section 1a of the April 1996 Report for details.

WA: P-2 and MW-32 were sealed on March 29, 1996; refer to April 1996 Progress Report text for details.

Contour Map Reporting Form

Site Name: Former Hexcel Facility, Lodi, NJ
Project No.: 94039

Figure No.: 1
Water levels taken on 10/9/96

1. Did any surveyed well casing elevations change from the previous sampling event? ☐Yes
   If yes, attach new "Well Certification -Form B" and identify the reason for the elevation change (damage to casing, installation of recovery system in monitoring well, etc.) ☒No

2. Are there any monitor wells in unconfined aquifers in which the water table elevation is higher than the top of the well screen? ☒Yes ☐No
   If yes, identify these wells.

   Monitor wells for which the water table elevations are higher than the top of the well screen are identified in Table 2: Summary of Well Construction Data provided in Appendix A.

3. Are there any monitor wells present at the site but omitted from the contour map? ☒Yes
   Unless the omission of the well(s) has been previously approved by the Department, justify the omissions. ☐No

   Quarterly ground water elevation monitoring plan approved by NJDEP in its June 12, 1995 letter. For information on additional omissions, please refer to Figure 1 and Table 1.

4. Are there any monitor wells containing separate phase product during this measuring event? ☒Yes-

   ***Note:** Although the product-interface probe did not register product, visual observation of the probe indicated presence of product (DNAPL).*

   ☐No

   Were any of the monitor wells with separate phase product included in the ground water contour map? ☒Yes
   If yes, show the formula used to correct the water table elevation. ☐No

   See above note.

5. Has the ground water flow direction changed more than 45 degrees from the previous ground water contour map? ☐Yes
   If yes, discuss the reasons for the change. ☒No

6. Has ground water mounding and/or depressions been identified in the ground water contour map? ☒Yes
   Unless the ground water mounds and/or depressions are caused by the ground water remediation system, discuss the reasons for this occurrence. ☐No

   It is not known why mounding occurs in the vicinity of building 2.

7. Are all the wells used in the contour map screened in the same water-bearing zone? ☒Yes ☐No
   If no, justify inclusion of those wells.

8. Were the ground water contours
   ☒ computer generated, ☐ computer aided, or ☐ hand-drawn?
   If computer aided or generated, identify the interpolation method(s) used.

   Kriging Routine

Contour Map Reporting Form

Site Name: Former Hexcel Facility, Lodi, NJ
Project No.: 94039

Figure No.: 2
Water levels taken on 10/9/96

1. Did any surveyed well casing elevations change from the previous sampling event? ☐Yes
   If yes, attach new "Well Certification -Form B" and identify the reason for the elevation change (damage to casing, installation of recovery system in monitoring well, etc.) ☒No

2. Are there any monitor wells in unconfined aquifers in which the water table elevation is higher than the top of the well screen? ☐Yes ☐No
   If yes, identify these wells.

   Not applicable because confined aquifer.

3. Are there any monitor wells present at the site but omitted from the contour map? ☐Yes
   Unless the omission of the well(s) has been previously approved by the Department, justify the omissions. ☒No

4. Are there any monitor wells containing separate phase product during this measuring event? ☐Yes ☒No

   Were any of the monitor wells with separate phase product included in the ground water contour map? ☐Yes
   If yes show the formula used to correct the water table elevation. ☒No

5. Has the ground water flow direction changed more than 45 degrees from the previous ground water contour map? ☐Yes
   If yes, discuss the reasons for the change. ☒No

6. Has ground water mounding and/or depressions been identified in the ground water contour map? ☐Yes
   Unless the ground water mounds and/or depressions are caused by the ground water remediation system, discuss the reasons for this occurrence. ☒No

7. Are all the wells used in the contour map screened in the same water-bearing zone? ☒Yes
   If no, justify inclusion of those wells. ☐No

8. Were the ground water contours
   ☒ computer generated, ☐ computer aided, or ☐ hand-drawn?
   If computer aided or generated, identify the interpolation method(s) used.

   Kriging method.

Appendix B

TABLE 3: MONTHLY WATER LEVEL/PRODUCT THICKNESS MEASUREMENTS
FOR NOVEMBER 1996
Former Hexcel Facility
Lodi, New Jersey

GEO Engineering
January 1997
File: 94039/wldata/Monthly.xls
Entered by: SG Check: RMS

-All measurements in feet-
-All elevations in feet (NGVD)-

MEASUREMENTS COLLECTED : 11/25/96

Well ID	Type	Depth to Water	Depth to Product		Product Thickness	Depth to Bottom	Elevation Top of Casing	Water Elevation	Comments
			DNAPL	LNAPL					
CW-7	shallow	7.75	--	--	--	13.99	26.13	18.38	
CW-12	shallow	7.24	--	--	--	13.96	25.71	18.47	Product on probe (DNAPL)**
CW-16	shallow	7.61	--	--	--	13.91	26.45	18.84	Product on probe (DNAPL)**
MW-6	shallow	10.30	17.70	--	0.61	18.31	30.74	20.44	Product on probe (DNAPL)
MW-8	shallow	11.79	--	--	--	17.33	30.26	18.47	Product on probe (DNAPL)**
RW1-1	shallow	5.23	--	--	--	14.27	28.24	23.01	
RW6-1	shallow	NA	--	--	--	NA	28.84	NA	Well not accessible due to drums
RW7-1	shallow	6.02	--	--	--	16.52	26.25	20.23	Product on probe (DNAPL)**
RW7-4	shallow	6.98	--	--	--	19.06	27.11	20.13	Product on probe (DNAPL)**
RW7-5	shallow	7.55	--	--	--	19.24	27.57	20.02	
PB-1	shallow	4.78	--	--	--	5.33	21.78	17.00	Sediment on probe; well filled with sediment
PB-2	shallow	1.72	--	--	--	5.82	21.25	19.53	Product on probe (DNAPL)**; sediment on probe

NOTES: All measurements of depths are from the top of casing unless otherwise noted.
Many of the wells have accumulated sediment which results in slight fluctuations in the measurements of depth to bottom.
-- Not detected by product interface meter.
* - In wells with LNAPL, water levels are corrected using the equation: DTW (corrected) = DTW (measured) - (Product thickness * specific gravity).
Specific gravity of 0.88 used for water level correction (petroleum lubricating oil).
** - Though the product-interface meter did not register presence of product in the well, product was observed on the probe.
NA - Well not accessible for monitoring.

TABLE 4: MONTHLY WATER LEVEL/PRODUCT THICKNESS MEASUREMENTS
FOR DECEMBER 1996
Former Hexcel Facility
Lodi, New Jersey

GEO Engineering
January 1997
File: 94039/wldata/Monthly.xls
Entered by: SG Check: SM

-All measurements in feet -
-All elevations in feet (NGVD)-

MEASUREMENTS COLLECTED : 12/23/96

Well ID	Type	Depth to Water	Depth to Product		Product Thickness	Depth to Bottom	Elevation Top of Casing	Water Elevation	Comments
			DNAPL	LNAPL					
CW-12	shallow	6.87	--	--	--	14.00	25.71	18.84	Product on probe (DNAPL)**
CW-16	shallow	6.99	--	--	--	13.95	26.45	19.46	Product on probe (DNAPL)**
MW-6	shallow	9.82	--	--	--	18.30	30.74	20.92	Product on probe (DNAPL)**
MW-8	shallow	11.29	--	--	--	17.38	30.26	18.97	Product on probe (DNAPL)**
RW1-1	shallow	4.55	--	--	--	14.31	28.24	23.69	
RW6-1	shallow	NA	--	--	--	NA	28.84	NA	Well not accessible due to drums
RW7-1	shallow	5.47	--	--	--	16.61	26.25	20.78	Product on probe (DNAPL)**
RW7-4	shallow	6.51	--	--	--	19.00	27.11	20.60	Product on probe (DNAPL)**
RW7-5	shallow	7.11	--	--	--	19.17	27.57	20.46	
PB-1	shallow	NM	--	--	--	NM	21.78	NM	Sediment on probe; well filled with sediment
PB-2	shallow	1.75	--	--	--	5.84	21.25	19.50	Product on probe (DNAPL, frothy)**; sediment on probe

NOTES: All measurements of depths are from the top of casing unless otherwise noted.
Many of the wells have accumulated sediment which results in slight fluctuations in the measurements of depth to bottom.
-- Not detected by product interface meter.
* - In wells with LNAPL, water levels are corrected using the equation: DTW (corrected) = DTW (measured) - (Product thickness * specific gravity).
Specific gravity of 0.88 used for water level correction (petroleum lubricating oil).
** - Though the product-interface meter did not register presence of product in the well, product was observed on the probe.
NA - Well not accessible for monitoring.
NM - Measurement of depth to water and depth to bottom could not be taken because the well point is filled up with sediment.

Appendix C

TABLE 5: PRODUCT COLLECTION (DNAPL) IN FOURTH QUARTER OF 1996
Former Hexcel Facility
Lodi, New Jersey

GEO Engineering
January 1997
File: 94039\prodcoll\prodcol2.xls
Sheet: Fourth QD'96 (DEP)

All Quantities are Expressed in Gallons Rounded to the Nearest 0.1

DATE	MW-6 (DNAPL)	MW-8 (DNAPL)	MW-26 (DNAPL)	RW6-1 (DNAPL)	RW7-1 (DNAPL)	RW7-4 (DNAPL)	RW7-5 (DNAPL)	CW-12 (DNAPL)	CW-16 (DNAPL)	PB-2 (DNAPL)	CW-15* (DNAPL)	TOTAL VOLUME RECOVERED
10/9/96 (Quarterly)	--	--	--	--	--	--	--	--	--	--	*	
11/25/96 (Monthly)	0.5	--	*	NA	--	--	--	--	--	--	*	
12/6/96	1.1	*	*	*	*	*	*	*	*	*	*	
12/13/96	0.7	*	*	*	*	*	*	*	*	*	*	
12/20/96	0.3	*	*	*	*	*	*	*	*	*	*	
12/23/1996 (Monthly)	--	--	*	NA	--	--	--	--	--	--	*	
TOTAL VOLUME RECOVERED, 4th QUARTER, 1996	2.6	--	--	--	--	--	--	--	--	--	--	2.6
TOTAL VOLUME RECOVERED, 3rd QUARTER 1996	0.6	--	--	--	--	--	--	--	--	0.1	--	0.7
TOTAL VOLUME RECOVERED, 10/94 - 6/96	13.2	1.0	0.4	0.1	0.3	--	--	0.7	0.4	4.0	0.8	20.9
TOTAL VOLUME RECOVERED (TOTAL SINCE 10/94)	16.4	1.0	0.4	0.1	0.3	--	--	0.7	0.4	4.1	0.8	24.2

Notes: For product recovery purposes, quantities greater than 0.1 gallons (approx. 1 cup) are considered to be "measurable". It is not practicable to separate product from mixture of water and product when quantity is less than 1 cup.

* Well not included in the weekly product recovery program.

-- i) Well was monitored and did not indicate recoverable product or ii) no measurable amount of product was recovered either by bailing or pumping.

^ CW-15 was removed from the product recovery program on 11/22/95 because ground water recovery equipment was re-installed in the well.

NA Well not available for monitoring due to drums.

TABLE 6: PRODUCT COLLECTION (LNAPL) IN FOURTH QUARTER OF 1996
Former Hexcel Facility
Lodi, New Jersey

GEO Engineering
January 1997
File: 94039\prodcoll\prodcol2.xls
Sheet: Fourth QL'96 (DEP)

All Quantities are Expressed in Gallons Rounded to the Nearest 0.1

DATE	MW-6 (LNAPL)	MW-8 (LNAPL)	MW-23 (LNAPL)	RW1-1 (LNAPL)	RW 6-1 (LNAPL)	RW7-4 (LNAPL)	RW7-5 (LNAPL)	CW-7 (LNAPL)	CW-12 (LNAPL)	CW-15 (LNAPL)	CW-16 (LNAPL)	MW-17 (LNAPL)	RW 15-1 (LNAPL)	TOTAL VOLUME RECOVERED
10/9/96 (Quarterly)	--	--	--	--	--	--	--	--	--	*	--	*	*	
11/25/96 (Monthly)	--	--	*	--	NA	--	--	--	--	*	--	*	*	
12/23/96 (Monthly)	--	--	*	--	NA	--	--	*	--	*	--	*	*	
TOTAL VOLUME RECOVERED, 4th QUARTER, 1996	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TOTAL VOLUME RECOVERED, 3rd QUARTER 1996	--	--	--	--	--	--	--	0.5	--	--	--	--	--	0.5
TOTAL VOLUME RECOVERED, 10/94 - 6/96	6.7	--	--	--	--	--	--	0.8	--	--	--	--	--	7.5
TOTAL VOLUME RECOVERED (TOTAL SINCE 10/94)	6.7	--	--	--	--	--	--	1.3	--	--	--	--	--	8.0

Notes: For product recovery purposes, quantities greater than 0.1 gallons (approx. 1 cup) are considered to be "measurable". It is not practicable to separate product from mixture of water and product when quantity is less than 1 cup.

* Well not included in the weekly product recovery.

-- i) Monitoring did not indicate recoverable product or ii) no measurable amount of LNAPL was recovered in the absorbent pad.

^ CW-15 was removed from the product recovery program on 11/22/95 because ground water recovery equipment was re-installed in the well.

NA Well not available for monitoring due to drums.

Appendix D

NOTE

TABLE 7. ESTIMATED SCHEDULE OF REMAINING REMEDIAL ACTIVITIES
Former Hexcel Facility
Lodi, New Jersey

GEO Engineering

January 1997
File: 94039\sched4.xls

TASK DESCRIPTION	1997											
	1	2	3	4	5	6	7	8	9	10	11	12
GROUND WATER REMEDIATION												
DNAPL/LNAPL recovery (temporary)												
Recover water from basement Bldg. 1												
Obtain air permit for pilot test												
Conduct hydraulic testing												
Conduct pilot test of recovery system												
Obtain off-site ground water data												
Modify design of ground water recov.sys.												
Prep. design proposal for recov. sys.												
NJDEP review of design proposal												
Install permanent recovery system												
Operate and maintain recovery system												
Evaluate need for DNAPL barrier												
Install deep well in vicinity of MW-1												
CLEANING OF SEWER LINE												
Cleanout/abandonment of sewer line												
Collect samples (and lab. analysis)												
Disposal of sludge/debris												
SOIL REMEDIATION												
Soil investigation												
Prepare soil investigation rpt./work plan												
NJDEP review of work plan												
Implement soil remediation												
SEDIMENT SAMPLING												
Prepare report of sediment sampling												
REPORTING												
Prepare quarterly progress reports												
Prepare final report												
NJDEP review and site inspection												
Case closure												

TABLE 7. ESTIMATED SCHEDULE OF REMAINING REMEDIAL ACTIVITIES
Former Hexcel Facility
Lodi, New Jersey

GEO Engineering

January 1997
File: 94039\sched4.xls

TASK DESCRIPTION	1998 1	2	3	4	5	6	7	8	9	10	11	12
GROUND WATER REMEDIATION												
DNAPL/LNAPL recovery (temporary)												
Recover water from basement Bldg. 1												
Obtain air permit for pilot test												
Conduct hydraulic testing												
Conduct pilot test of recovery system												
Obtain off-site ground water data												
Modify design of ground water recov. sys.												
Prep. design proposal for recov. sys.												
NJDEP review of design proposal												
Install permanent recovery system												
Operate and maintain recovery system												
Evaluate need for DNAPL barrier												
Install deep well in vicinity of MW-1												
CLEANING OF SEWER LINE												
Cleanout/abandonment of sewer line												
Collect samples (and lab. analysis)												
Disposal of sludge/debris												
SOIL REMEDIATION												
Soil investigation												
Prepare soil investigation rpt./work plan												
NJDEP review of work plan												
Implement soil remediation												
SEDIMENT SAMPLING												
Prepare report of sediment sampling												
REPORTING												
Prepare quarterly progress reports												
Prepare final report												
NJDEP review and site inspection												
Case closure												

TABLE 7. ESTIMATED SCHEDULE OF REMAINING REMEDIAL ACTIVITIES
Former Hexcel Facility
Lodi, New Jersey

GEO Engineering

January 1997
File: 94039\sched4.xls

TASK DESCRIPTION	1999 1	2	3	4	5	6	7	8	9	10	11	12
GROUND WATER REMEDIATION												
DNAPL/LNAPL recovery (temporary)												
Recover water from basement Bldg. 1												
Obtain air permit for pilot test												
Conduct hydraulic testing												
Conduct pilot test of recovery system												
Obtain off-site ground water data												
Modify design of ground water recov. sys.												
Prep. design proposal for recov. sys.												
NJDEP review of design proposal												
Install permanent recovery system												
Operate and maintain recovery system												
Evaluate need for DNAPL barrier												
Install deep well in vicinity of MW-1												
CLEANING OF SEWER LINE												
Cleanout/abandonment of sewer line												
Collect samples (and lab. analysis)												
Disposal of sludge/debris												
SOIL REMEDIATION												
Soil investigation												
Prepare soil investigation rpt./work plan												
NJDEP review of work plan												
Implement soil remediation												
SEDIMENT SAMPLING												
Prepare report of sediment sampling												
REPORTING												
Prepare quarterly progress reports												
Prepare final report												
NJDEP review and site inspection												
Case closure												

TABLE 7. ESTIMATED SCHEDULE OF REMAINING REMEDIAL ACTIVITIES
Former Hexcel Facility
Lodi, New Jersey

GEO Engineering

January 1997
File: 94039\sched4.xls

TASK DESCRIPTION	2000 1	2	3	4	5	6	7	8	9	10	11	12
GROUND WATER REMEDIATION												
DNAPL/LNAPL recovery (temporary)												
Recover water from basement Bldg. 1												
Obtain air permit for pilot test												
Conduct hydraulic testing												
Conduct pilot test of recovery system												
Obtain off-site ground water data												
Modify design of ground water recov. sys.												
Prep. design proposal for recov. sys.												
NJDEP review of design proposal												
Install permanent recovery system												
Operate and maintain recovery system												
Evaluate need for DNAPL barrier												
Install deep well in vicinity of MW-1												
CLEANING OF SEWER LINE												
Cleanout/abandonment of sewer line												
Collect samples (and lab. analysis)												
Disposal of sludge/debris												
SOIL REMEDIATION												
Soil investigation												
Prepare soil investigation rpt./work plan												
NJDEP review of work plan												
Implement soil remediation												
SEDIMENT SAMPLING												
Prepare report of sediment sampling												
REPORTING												
Prepare quarterly progress reports												
Prepare final report												
NJDEP review and site inspection												
Case closure												

Appendix E

GEO Engineering

150 Mineral Spring Drive
Dover, New Jersey 07801
201 361-3600 FAX 361-3800

January 7, 1997

John Brzezenski
P.O. Box 1715
Baltimore, MD 21203-1715

SUBJ: **Request Access to Army Corps Well, MW08**
Lower Saddle River Flood Control Project
Lodi, New Jersey
GEO Project No. 94039 T4

Dear Mr. Brzezenski:

This letter requests permission to access the above-referenced monitoring well installed for the U.S. Army Corps of Engineers (Army Corps). The monitoring well is located on Block 69 Lot 1-14 in Lodi, on a property owned by Mr. Charles Pinto and operated as Bridgeview II Auto Detailing (Pinto property). Upon obtaining access permission, we would survey the well and measure depth to bottom and depth to water in the well. We might also collect ground water samples for analyses, if needed.

GEO Engineering is the environmental consultant for Hexcel Corporation (Hexcel), former owner of the Fine Organics property in Lodi. The Fine Organics facility is across the Saddle River from the Pinto property. This facility is under Industrial Site Remediation Act (ISRA) investigation by the New Jersey Department of Environmental Protection (NJDEP).

Hexcel has been asked by the NJDEP to provide information concerning ground water samples that may have been obtained from properties located across the Saddle River from the former Hexcel facility. Upon our request, the Army Corps had provided us with sampling data and the boring log for MW08. We have requested permission to access MW08 to be able to answer some questions raised by the NJDEP subsequent to their review of the data. Since September 1996, we have been in communication with Joseph Deery and Richard Gadzek of the Army Corps and Lisa Magee of Roy F. Weston in an effort to obtain permission to access MW08.

Thank you very much for your consideration of this request. We will call you within two weeks of the transmittal of this letter for your response. In the meantime, please call if you have any questions or need further information.

Sincerely,

GEO ENGINEERING, INC.

Sunila Gupta
Project Engineer

Marjorie A. Piette
Project Manager

SG/MAP/lll
cc: A. William Nosil
Lisa Bromberg, Esq.

882550031

Appendix F

GEO Engineering

150 Mineral Spring Drive
Dover, New Jersey 07801
201 361-3600 FAX 361-3800

Appendix F

The following table summarizes the disposal documentation for the fourth quarter of 1996. Copies of manifests are attached.

Date Accepted at Disposal Facility	State Manifest Document Number	Quantity	Comments
11/6/96	NJA 2638279	5553 pounds	19 Drums; Spent carbon and PPE/Debris
11/25/96	999718 (Texas)	1779 Kilograms	9 Drums; DNAPL/Water Mixture (Product Recovery)

State of New Jersey
Department of Environmental Protection and Energy
Hazardous Waste Regulation Program
Manifest Section
CN 421, Trenton, NJ 08625-0421

2 6 3 8 2 7 9

Please type or print in block letters. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039. Expires 9-30-96

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: NJD986583134
Manifest Document No.: 3
2. Page 1 of 1
Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
HEXCEL CORPORATION
5794 W. Las Positas BLVD.
Pleasanton, CA 94588
4. Generator's Phone (500) 433-5072

A. State Manifest Document Number: NJA 2638279
B. State Generator's ID (Gen. Site Address): SAME

5. Transporter 1 Company Name: Custom Environmental Transport
6. US EPA ID Number: DED980918858
C. State Trans. ID NJDEPE: 10250
Decal No.: 73245
D. Transporter's Phone: 302 4262700

7. Transporter 2 Company Name: N/A
8. US EPA ID Number:
E. State Trans. ID NJDEPE:
Decal No.:
F. Transporter's Phone:

9. Designated Facility Name and Site Address
ROLLINS ENVIRONMENTAL SERVICES (NJ) INC.
Rt 322 & I-295
Bridgeport, NJ 08014
10. US EPA ID Number: NJD053288239
G. State Facility's ID:
H. Facility's Phone: 609 467-3100

	11. US DOT Description (Including Proper Shipping Name, Hazard Class or Division, ID Number and Packing Group)	HM	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.	Hazardous Waste Solid, N.O.S., 9, NA3077, PG III (D021, D022, D027, D028, D039, D040A)	X	007	TN	00724	P	D021
b.	Environmentally Hazardous Substance, Solid, N.O.S 9, UN3077, PG III (Polychlorinated Biphenyls, Methylene Chloride)		012	TN	04824	P	X910
c.							
d.							

J. Additional Descriptions for Materials Listed Above
11a: 1-311914 S - PPE/Absorbents
11b: 1-311915 S-Spent Carbon

K. Handling Codes for Wastes Listed Above
a. b. c. d.

15. Special Handling Instructions and Additional Information
In case of emergency contact: [illegible] (500) 433-5072
11a & b ERG# 171
Pickup Location: Hexcel Corp.
205 Main Street
Lodi, NJ 07644
PAAH 0319

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

As Agent on Behalf of Hexcel Corp.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: Robert M. Shusko
Signature: [signature]
Month Day Year: 11 05 96

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Jason Troutman
Signature: [signature]
Month Day Year: 11 05 96

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name:
Signature:
Month Day Year:

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name:
Signature:
Month Day Year:

NJA 2638279

EPA Form 8700-22 (Rev. 9/88) Previous editions are obsolete.

SIGNATURE AND INFORMATION *MUST* BE LEGIBLE ON ALL COPIES

6. GENERATOR MAIL TO TSD'S STATE

882550034

TEXAS NATURAL RESOURCE
CONSERVATION COMMISSION
P.O. Box 13087
Austin, Texas 78711-3087

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form approved. OMB No. 2050-0039, expires 09/30/95

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: N J D 9 8 6 5 8 4 1 3 4 — Manifest Document No. 96003

2. Page 1 of 2

Information in the shaded areas is not required by Federal law.

A. State Manifest Document Number: 00999718

3. Generator's Name and Mailing Address
HEXCEL CORPORATION
5794 W. Las Positas Blvd.
Pleasanton, CA 94588 ~~(201)361-5600 Kevin Greener~~ kmg

4. Generator's Phone (800) 433-5072

B. State Generator's ID: SAME

5. Transporter 1 Company Name: Custom Environmental Transport

6. US EPA ID Number: D E D 9 8 0 9 1 8 8 5 8

C. State Transporter's ID

D. Transporter's Phone: 302 426-2700

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address
ROLLINS ENVIRONMENTAL SERVICES (TX) INC.
2027 Battleground Road
Deer Park, TX 77536

10. US EPA ID Number: T X D 0 5 5 1 4 1 3 7 8

G. State Facility's ID

H. Facility's Phone: (713)930-2300

11A. HM	11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
X	a. Hazardous Waste Liquid, N.O.S, 9, NA3082, PG III, RQ (2-Bromoethylbenzene, Tetrachloroethylene)	009	DM	1779	Kg	OUTS119H
	b. (Polychlorinated Biphenyls)					
	c.					
	d.					

J. Additional Descriptions for Materials Listed Above
11a, HO-311916 DNAPL Liquid
D006, D008, D009, D019, D021, D022, D027, D028, D029, D039, D040, ~~M660~~ kmg

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
Out- Of-Service Date: 2/10/96
In case of emergency contact: A. William Nosil (800) 433-5072
11a ERG# 171
Pickup Location: Hexcel Corp.
205 Main Street
Lodi, NJ 07644
NJDEP - 10250 PA-AH 0319

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations.
If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

As Agent on Behalf of Hexcel Corp.

Printed/Typed Name	Signature	Month	Day	Year
Robert M. Shusko	Robert M. Shusko	11	05	96

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
Jason Troutman	Jason Troutman	11	05	96

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year

TNRCC-0311 (Rev. 07/13/94)

White - original Pink-TSD Facility Yellow-Transporter Green-Generator's first copy

882550035